

TDL
9/18/06

~~This application claims the benefit of US Provisional Application
No. 60/292,583 filed May 22, 2001.~~

[ABSTRACT]

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~~ADEQUATE QUANTISATION IN MULTILEVEL HALFTONING~~

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The method reproduces an electronic image, having pixels, as a
multilevel halftone image on a multilevel output device having N
different allowed output values (possible density levels) by
- choosing for any pixel p a real subset S_p containing N_p allowed
values out of the set S of N allowed levels

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- quantizing the input pixel value of the pixel p to obtain an
output pixel value out of the N_p values in S_p by means of a
halftoning algorithm,
- rendering the image by rendering the pixels with the output device
using the obtained output pixel values.

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The real subset may be formed by the allowed output values closest
to the input pixel value.

The quantization may be done by an error diffusion algorithm

The used method prevents occurrence of pixels having deviating
densities distorting the output image.

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